

Boeuf WMA

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Compartment 11, 15, and 16 Rx

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Area Description

Boeuf WMA is located in Caldwell and Catahoula Parishes, 10 miles southeast of Columbia, LA. The Proposed treatment will be conducted within the greentree reservoir located in compartments 11, 15, and 16. These compartments consist of 6,152 acres within sections 1, 2, 3, 10, 11, 12, 13, 14, and 15 of T12N, R5E and sections 34 and 35 of T13N, R5E. The northern boundary is Sawyer Pond Bayou and the Boeuf River. The southern boundary consists of a portion of Pender Ridge Road and Vee Lake Road. The eastern boundary comprises the Boeuf River and Vee Lake ATV trail. The western boundary is Big Ridge road.

Current Conditions

There are several forest types that currently make up the forest composition within the treatment area. Forest types include Baldcypress (723 acres), Willow Oak (741 acres), Overcup Oak-Bitter Pecan (795 acres), and Overcup Oak-Swamp Privet (937 acres).

Forest Types

The Baldcypress forest type is dominated predominately by baldcypress (approx. 90%). It varies in composition from a sparse cypress overstory with a buttonbush understory, to well stocked pure stands of cypress with no midstory, to cypress and black willow with a water elm midstory. This forest type is commonly found adjacent to lakes, drains or frequently flooded areas.

The Willow Oak forest type is found on the higher elevation, higher fertility, and better drained soils of the compartment. The overstory is moderately stocked, with stems in the 8 to 20-inch diameter range, with the majority of the stems being 8 to 12 inches in diameter. Some larger stems are present, but they are scattered throughout the stand. Other species associated with this forest type include Nuttall oak, overcup oak, sugarberry, American elm and green ash. Midstory is designated as moderate coverage with species including sweetgum, *Crataegus*, deciduous holly, *Vitis*, rattan, *Smilax* and palmetto.

The Overcup Oak-Bitter Pecan forest type is found on some of the lower areas of compartment 11, 15, and 16. This type is characterized by having a poorly stocked overcup oak and bitter pecan overstory. Trees in this forest type have short overall tree heights, but diameter size is above average with many overcup oaks having diameters greater than 20 inches. The bitter pecan and overcup oak stems in these zones exhibit substantial dieback in the upper crown. Understory vegetation is sparse to absent with small amounts of grasses being the only vegetation present. Other species found in the understory include rattan, red vine, poison ivy, and trumpet creeper. The midstory exhibits low to moderate cover density with willow oak, swamp privet, and deciduous holly accounting for almost all of the midstory species found. Because of the copious willow oak regeneration found, it is assumed that this zone is going through a hydrological change which is making the site drier than it was in the past decades. Low diversity is the best way to describe this forest type.

The Overcup Oak-Swamp Privet forest type is found in low depressions that generally hold water throughout the year. These areas have extremely low diversity and the extremely wet

conditions contribute to the reduction of both understory and midstory. The overcup oak present in this forest type are of poor quality.

Soil

The primary soil type in these compartments is alligator clay. These soils are poorly drained and frequently flood during the spring and winter months. Perry clay and Perry silty clay loam soils are also found within this area. These soils are poorly drained and occasionally flood. Hebert silt loam soils are found along Big Ridge Rd. and Pender Ridge Rd. and are somewhat poorly drained and have high available water storage. Yorktown clay soils can be found in the lowest lying areas and are frequently flood.

Wildlife

Waterfowl are the primary wildlife utilizing these compartments during the winter months when the compartment is flooded. Other species of concern are migrant songbirds and wading birds. White-tailed deer, wild turkeys, Louisiana black bear, rabbits, and feral hogs use these areas when the water recedes during late spring and summer and on areas within these compartments that do not flood. Numerous potential Louisiana black bear cavities are available throughout the compartment. Squirrels and other arboreal species utilize these forested areas throughout the year.

Objectives

- Establish desirable mast species
- Remove swamp privet and buttonbush competition within treatment areas
- Retain scattered overcup oak
- Increase long-term wildlife habitat and mast production
- Enhance the greentree reservoir and improve wintering habitat for waterfowl

Methods

- Prepare 3 areas of site preparation, followed by subsequent planting of predominately Nuttall oak seedlings at a rate of 435 TPA (see attached map #3). Each area will be a treatment phase that will occur 3-5 years following from the previous phase.
 - **Phase 1**-A proposed treatment of 200 acres of site preparation will be treated followed by subsequent planting.
 - **Phase 2**-Approxiametely 3-5 years following Phase 1 completion, Phase 2 will begin with 185 acres of site preparations followed by subsequent planting.
 - **Phase 3**- Approximately 3-5 years following Phase 2 completion, Phase 3 will begin with 200 acres of site preparations followed by subsequent planting.

Concerns

- Potential of flooding impact on planted seedlings during first growing season
- Limit soil disturbance and compaction.

Treatments

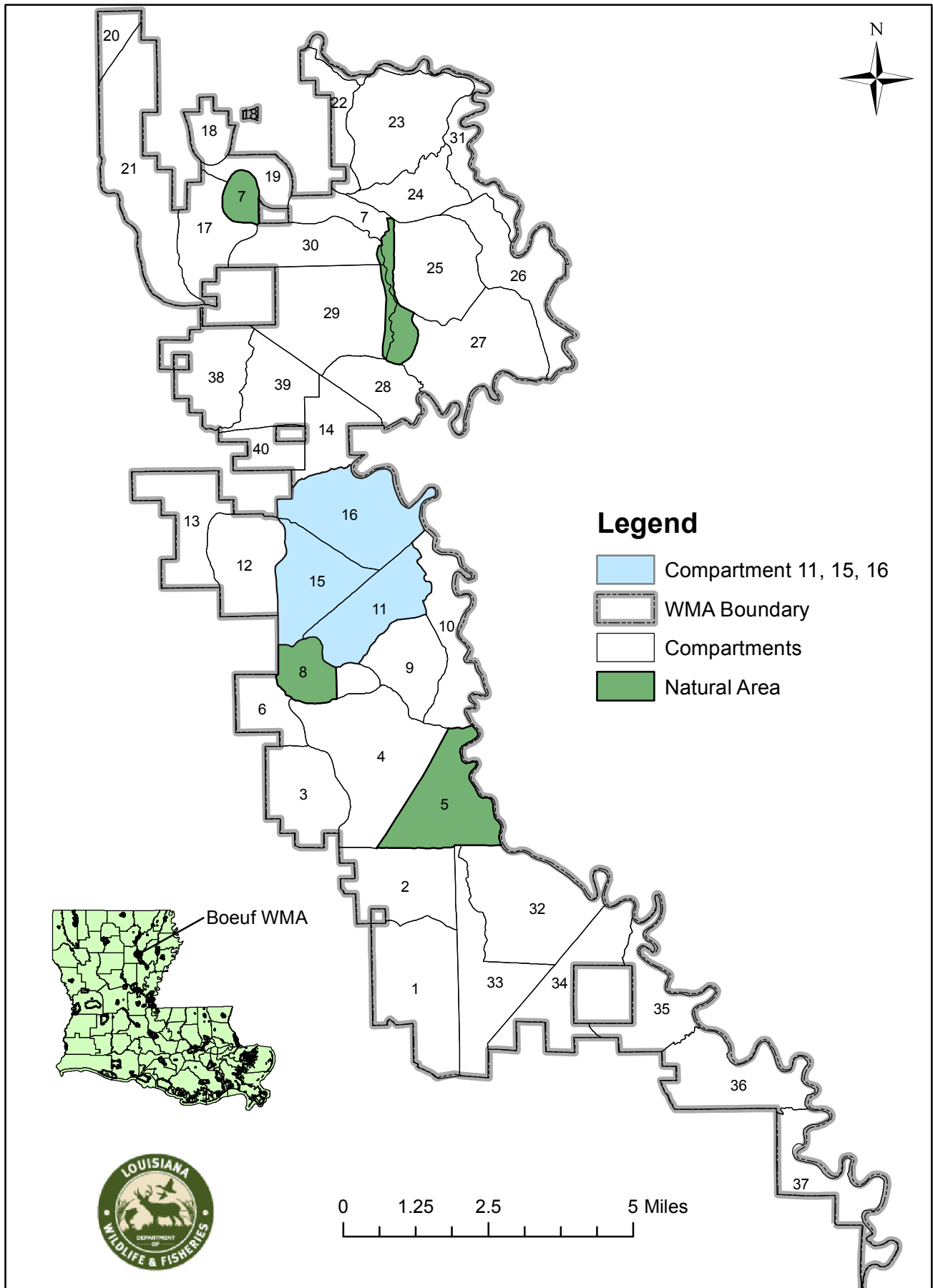
By dividing treatment areas into three phases and separating each phase by three to five years seedling establishment will be ensured and habitat structure in the GTR will be increased. Each of these phases will utilize a dozer with v-blade attachments for site preparation, which will allow for the removal of swamp privet and other undesirable vegetation. This site preparation method is required to set back succession and prepare the site for planting of desirable oak species. Each of the treatment areas will require a single dozer pass approximately 12 feet apart across the entire treatment area. To further limit soil compaction and disturbance, dozers will only operate during extend dry periods in summer and early fall. After the site preparation is complete, unwanted vegetation will decompose and provide nutrients back to the site. Seedlings will be planted on 10x10 foot spacing within tractor passes.

Additional Entry Requirements

- This treatment will require entries over the course of subsequent years for site preparation and planting
- Re-entry as necessary to monitor seedling survival and development

Boeuf WMA

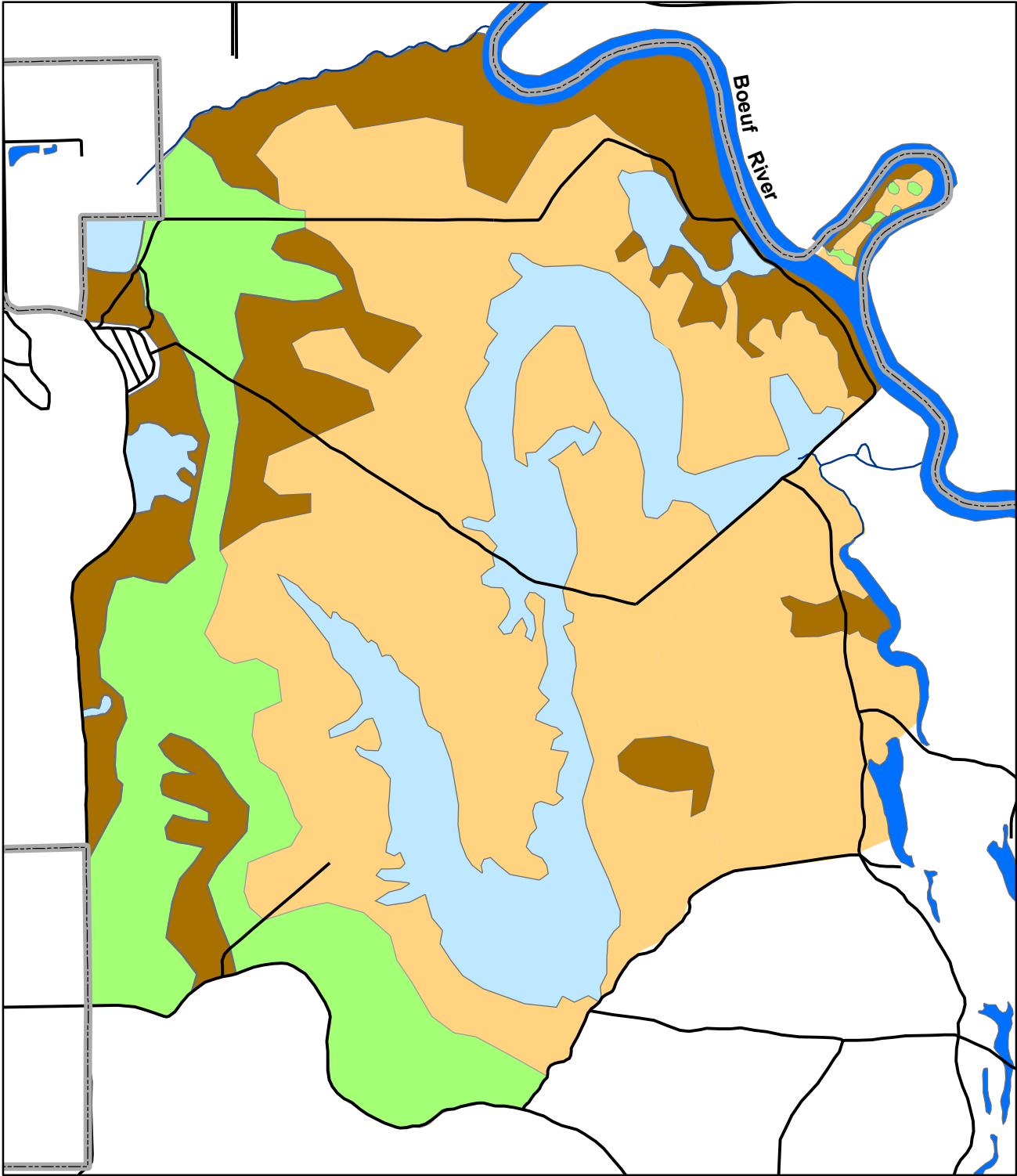
Map 1



Forest Type









Boeuf WMA

Map 2



Legend

0 0.25 0.5 1 Miles

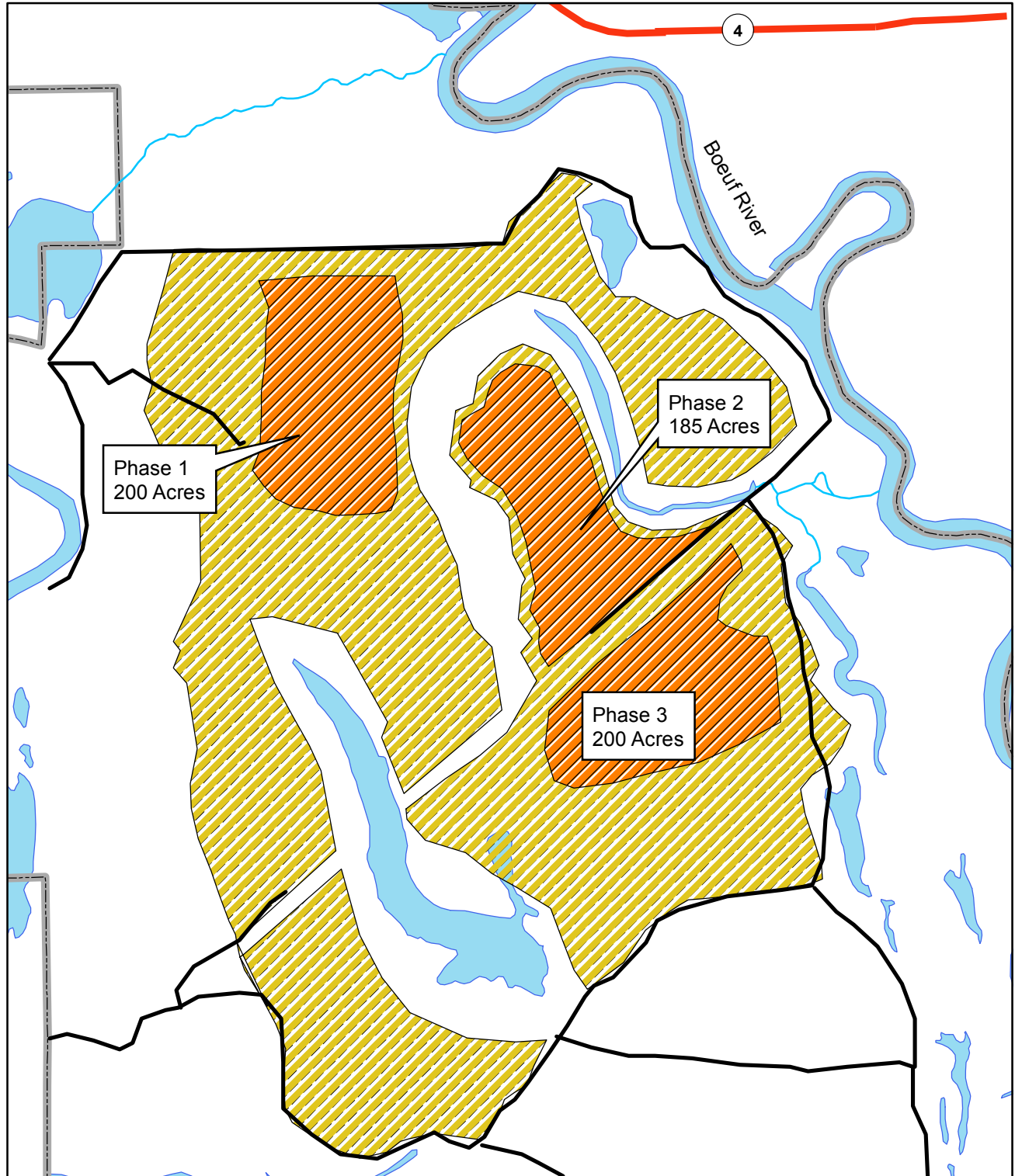
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|--|--|
|  WMA Boundary |  Baldcypress (723 Acres) |
|  Roads |  Willow Oak (741 Acres) |
|  Rivers & Lakes |  Overcup/ BitterPecan (795 Acres) |
|  Bayou |  Overcup/ SwampPrivet (937 Acres) |









Proposed Treatment

Boeuf WMA

Map 3



Legend

- | | | | |
|---|------------------------|---|---------|
|  | WMA Boundary |  | Highway |
|  | Proposed GTR Treatment |  | Roads |
|  | Treatment Phases |  | Water |

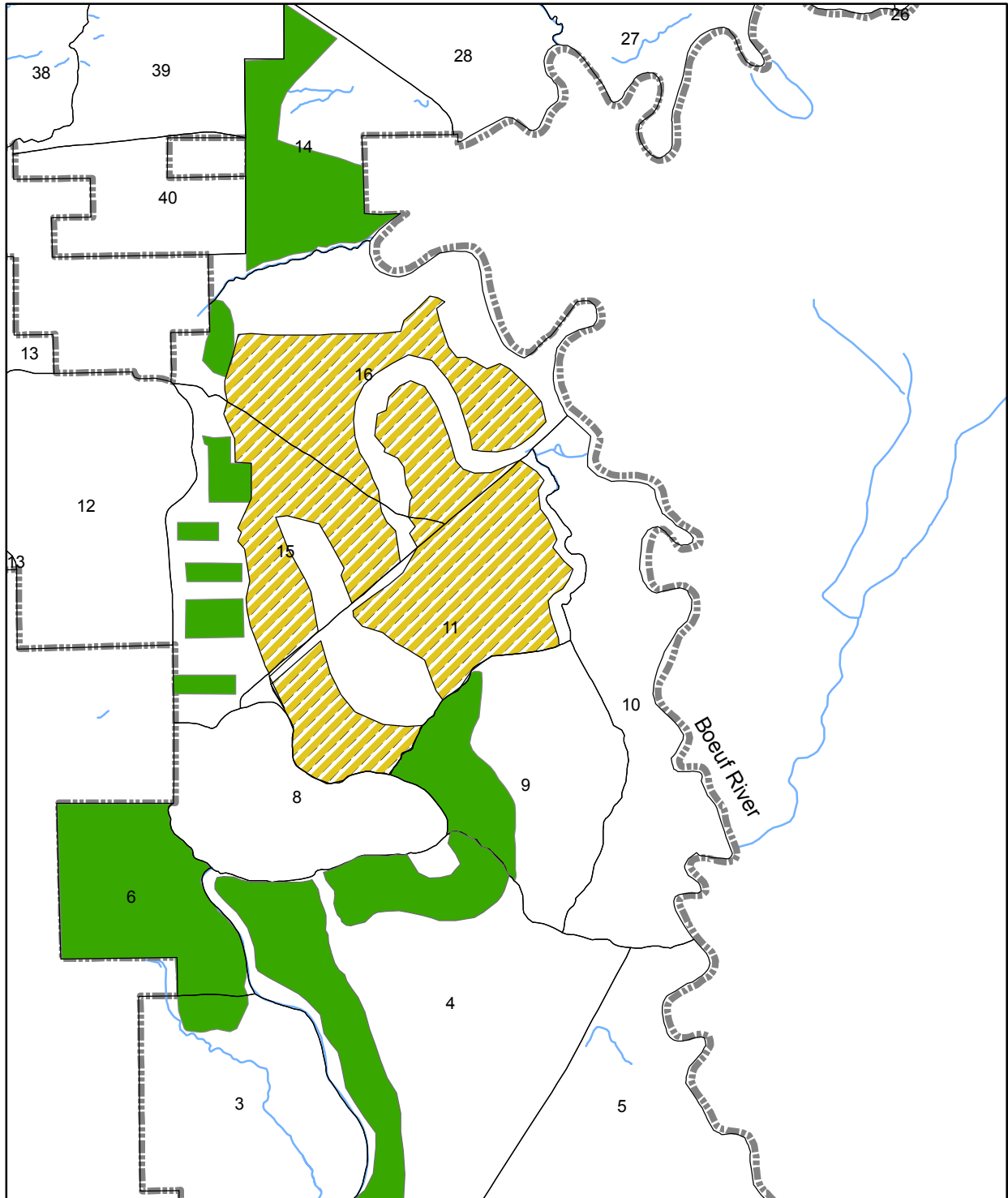
0 0.275 0.55 1.1 Miles



Adjacent Treatments





Boeuf WMA

Map 4



Sale #	Treatment	Acres	Date	Compartment
42-1-192	Individual Selection	180	1994	15, 16
42-2-194	Individual Selection	697	1995	3, 6
42-5-201	Individual Selection	259	2002	9
42-8-114	Individual Selection	860	2014	4
42-9-115	Individual Selection	474	2015	14
42-10-115	Site Prep./Planting	900		11, 15, 16

Legend

-  Compartments
-  Proposed GTR Treatment
-  Individual Selection
-  WMA Boundary

0 0.5 1 2 Miles

